IN THE CLAIMS

Current Listing Of Claims:

1. (Currently Amended) A method comprising:

depositing a film layer on a substrate;

depositing a non-chemically amplified photoresist layer upon the film layer, the non-chemically amplified photoresist having a developer-soluble resin component and a photoactive compound component, the photoactive compound inhibiting the solubility of the developer-soluble resin;

exposing selected portions of the non-chemically amplified photoresist layer to a light source such that a solubility of the selected portions of the non-chemically amplified photoresist layer is promoted; and

developing the exposed portions of the non-chemically amplified photoresist layer.

2. (Original) The method of claim 1 wherein the developer-soluble resin is a polyhydroxystyrene-based compound.

3. (Currently Amended) The method of claim 2 wherein the solubility of the selected portions of the non-chemically amplified photoresist layer is promoted by the photoactive compound forming an acid.

4. (Original) The method of claim 2 wherein the photoactive compound contains a phenyl group.

5. (Original) The method of claim 3 wherein the acid is a carbonyl acid.

6. (Original) The method of claim 1 wherein the developer-soluble resin is produced through a free radical polymerization process using a component selected from the group consisting of vinyl acid, vinyl phenol, and vinyl phenol substitutes.

7. (Original) The method of claim 1 wherein the light source has a wavelength in the extreme ultra-violet region.

8. (Currently Amended) The method of claim 7 further comprising:

etching portions of the film layer underlying the exposed portions of the non-chemically amplified photoresist layer; and

etching a remaining portion of the non-chemically amplified photoresist layer to produce a patterned film layer having one or more features, at least one of the features having a critical dimension of approximately 15 nanometers.

9. (Original) The method of claim 8 wherein the at least one feature has a line wide roughness of less than 2 nanometers.

10. (Currently Amended) A non-chemically amplified photoresist comprising:

a resin component, the resin soluble in a developer; and

a photoactive compound, the photoactive compound uniformly distributed within the non-chemically amplified photoresist, the photoactive compound promoting solubility of a selected portion of the non-chemically amplified photoresist exposed to a light source and inhibiting the solubility of an unexposed portion of the non-chemically amplified photoresist.

11. (Currently Amended) The non-chemically amplified photoresist of claim 10 wherein the resin component is a polyhydroxystyrene-based compound.

12. (Currently Amended) The photoresist of claim 11 wherein the solubility of the selected portion of the non-chemically amplified photoresist is promoted by the photoactive compound forming an acid.

13. (Currently Amended) The non-chemically amplified photoresist of claim 12 wherein the photoactive compound contains a phenyl group.

14. (Currently Amended) The non-chemically amplified photoresist of claim 12 wherein the acid is a carbonyl acid.

15. (Currently Amended) The non-chemically amplified photoresist of claim 10 wherein the resin component is produced through a free radical polymerization process using a

component selected from the group consisting of vinyl acid, vinyl phenol, and vinyl phenol substitutes.

16. – 20. (Cancelled)